

Cancer and nutrition:

Are we eating our way to the grave?

by Sharon I. Forrest

The maxim 'eat more broccoli, cauliflower and cabbage' goes beyond what your mother told you. It is also one of the dietary guidelines given in the 1986 report from the American Cancer Society (ACS). These three vegetables, called crucifers, have been described as containing agents which help prevent cancer.

The report also advises avoiding obesity, eating less fat and more fibre, cutting down on salt-cured foods, increasing consumption of complex carbohydrates (such as rice and potatoes) and keeping alcohol and refined sugar consumption to a minimum.

According to Dr. Gerald Batist of the Montréal General Hospital, these guidelines are suggestions based on observations. Batist said, "The public is often barraged by newspaper articles claiming dramatic discoveries, many of which are based on similar suggestive evidence." He added, "The average person does not know how to interpret this information."

Dr. Batist addressed a packed theatre last week, describing state-of-the-art research on the 'com-

plex' relationship between diet and cancer. The crowd included cancer patients, parents and friends of cancer patients, doctors, scientists and practitioners of holistic medicine, some of whom became hostile when Batist said at the end of his talk, "I cannot give you a dietary prescription and I doubt that one exists."

Early humans followed the same guidelines

Since the Industrial Revolution 250 years ago, our diet has been slowly changing to include more fat, less fibre, more refined sugar and less complex carbohydrates. At the same time, the incidence of cancer is on the rise.

For the first 50,000 years of human history, *homo sapiens* consumed a low fat, high fibre diet. This diet contributed towards a significantly lower risk of contracting cancer than we have today. According to a recent edition of *Scientific American*, humans are now in a "biological time warp." Our bodies are now adapted to the old diet of traditional hunter/gatherers. Yet in today's hamburger society North Americans do not fulfill the nutritional needs of which they are biologically suited for.

How does cancer work?

In order to examine the possible effects of diet on cancer, it is essential to understand how cancer works. Very basically, cancer involves two stages: (1) initiation, a single irreversible strike from a carcinogen or mutagen to the genetic material of the target tissue and (2) promotion, caused by the action of continuously applied factors which induce the growth of the tumor.

It is because of the existence of these two distinct stages that research into the diet/cancer relationship has to be approached from two perspectives. At the level of initiation, carcinogens and mutagens are under analysis in terms of their ability to prevent or cause cancer. Anti-cancer agents and their effects on tumor promotion are studied separately since they affect those who already have cancer.

According to Batist, "In the past, much attention has been paid to cause and prevention of cancer and not enough to its promotion."

Batist's lecture showed there is a great wealth of information available on the influence of diet on dietary factors which 'cause' cancer, most of which is correlative.



Looks good eh? This pizza could kill you.

Studies have shown that there is a linear relationship between fat intake and the incidence of cancer: the more fat, the more breast cancer. Canadians and Americans consume some of the highest levels of fat per capita in the world and they have one of the highest incidences of breast cancer. The Japanese, in contrast, consume relatively low levels of fat and have a correspondingly low incidence of breast cancer.

Similar correlative data is available for colon cancer. Again, North Americans, because of their fat ridden diets, are far more prone to develop colon cancer than are the Japanese. But the diet of Japan is not ideal either—their love of salted fish is related to a high incidence of stomach cancer, a type of cancer which is less common in Canada and the U.S.

Numerous studies have been done relating specific elements of diet to cancer. But in order to pin down if any of these substances actually cause (or promote) cancer, animal studies and case/control analyses are necessary. As Batist said, "correlation is not enough."

"If mice could write the history of cancer, they would call it the holocaust," said Batist referring to the vast body of cancer experimentation done in mice and other animals. He went on to describe the findings from animal studies about the presence of carcinogens and mutagens in our diet and their effects.

"There are two types of carcinogens," said Batist, "natural and synthetic." He added, "nature provides barriers to many of the natural carcinogens, usually in the form of detoxification systems." Oxygen is

one such natural carcinogen, but the human body has evolved enzymes so that the potentially damaging action of oxygen is diverted. "Unfortunately," said Batist, "our bodies have not yet evolved barriers against man-made cancer causing agents such as dioxin."

"Diet is more likely involved in the promotion of cancer rather than its initiation," said Batist.

But dietary research results are not specific enough and some of the diet changes which would decrease the chances of cancer may aggravate other health problems, such as high blood pressure. Saturated fats, long associated with elevated blood pressure, are half as likely to be positively correlated with cancer as are polyunsaturated fats.

"This could put you in a real bind as to what you are supposed to do," said Batist.

Studies on fibre is another growing area of cancer research. According to Batist, it could have multiple roles. Fibre has been known to reduce exposure to carcinogens of the gut, dilute bile acids, bind carcinogens in the gut and

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Arthritis: unlocking the mystery

by Alison Hunter

Arthritis is for many a painful and debilitating disease. But according to Dr. Morton Kapusta of Montréal's Jewish General Hospital, recent advances in understanding the disease may soon offer hope.

Kapusta spoke last week at McGill to a packed audience on the causes, treatments and possible

cures for osteo and rheumatoid arthritis.

Wherever two bones meet, each is capped in cartilage, a smooth and elastic material of variable hardness. Cartilage cells make two kinds of fibres. One is spongy—it soaks up fluids, which can be squeezed out under pressure, cushioning an impact.

The other fibre, collagen, is relatively brittle. It makes a cage to hold

the spongy fibres in place. Collagen fibres may be damaged and begin to shred, so that the spongy fibres can escape. The result is like taking all of the stuffing out of a pillow.

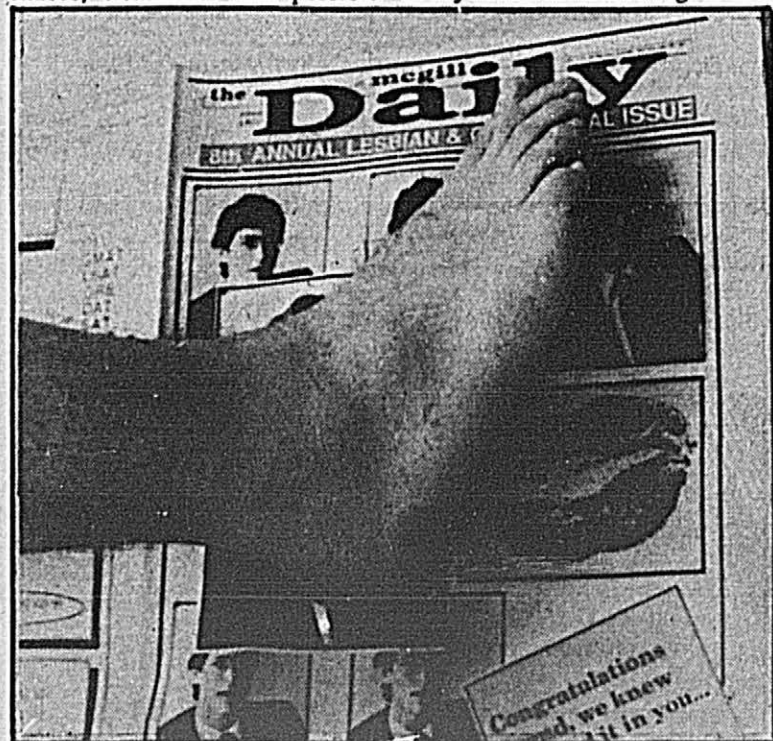
The remaining collagen has no give, and provides no protection for the bones. Under normal circumstances, bones will grow stronger if they are used more (or decay if not used, as in the case of shrinking astronauts). In osteo arthritis the impact of the two unprotected bones stimulates them to grow. The resulting joints become deformed by bony overgrowths.

Movement is not usually impaired or painful in osteo arthritis, although the gnarled appearance of the bony overgrowths can cause anxiety. According to Kapusta, "No cure is currently available, but in the future vitamin A may provide the key to collagen repair."

Rheumatoid arthritis is a more mysterious and a more debilitating condition than osteo arthritis. It is recognized by the painful, symmetrical swelling around the joints.

Each joint is surrounded by a membrane, making a fluid-filled cavity. In rheumatoid arthritis the membrane is inflamed and the cavity swells with a whitish fluid. The fluid contains many polymorph cells (part of the immune system).

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Dailylites have nice joints.

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Important errata

Daily newswriters' meeting, today, 16h00, in God's little bit of heaven in the Union Building, B-03. Vibes watchers optional.

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Richard Levins talks on holistic science:

Refitting the pieces

by Douglas Dwyer

In a world of increasing specialization, it is rare to find someone who can see the whole above the complex and often isolated parts of science.

Richard Levins, John Rock Professor of Population Sciences at Harvard University's School of Public Health is such a person.

Over-specialization, Levins believes, is the bane of modern science. "A lot of projects that have great promise fail, and they fail, not because we don't know the details of the parts, but because we don't understand the connections to the whole," he said.

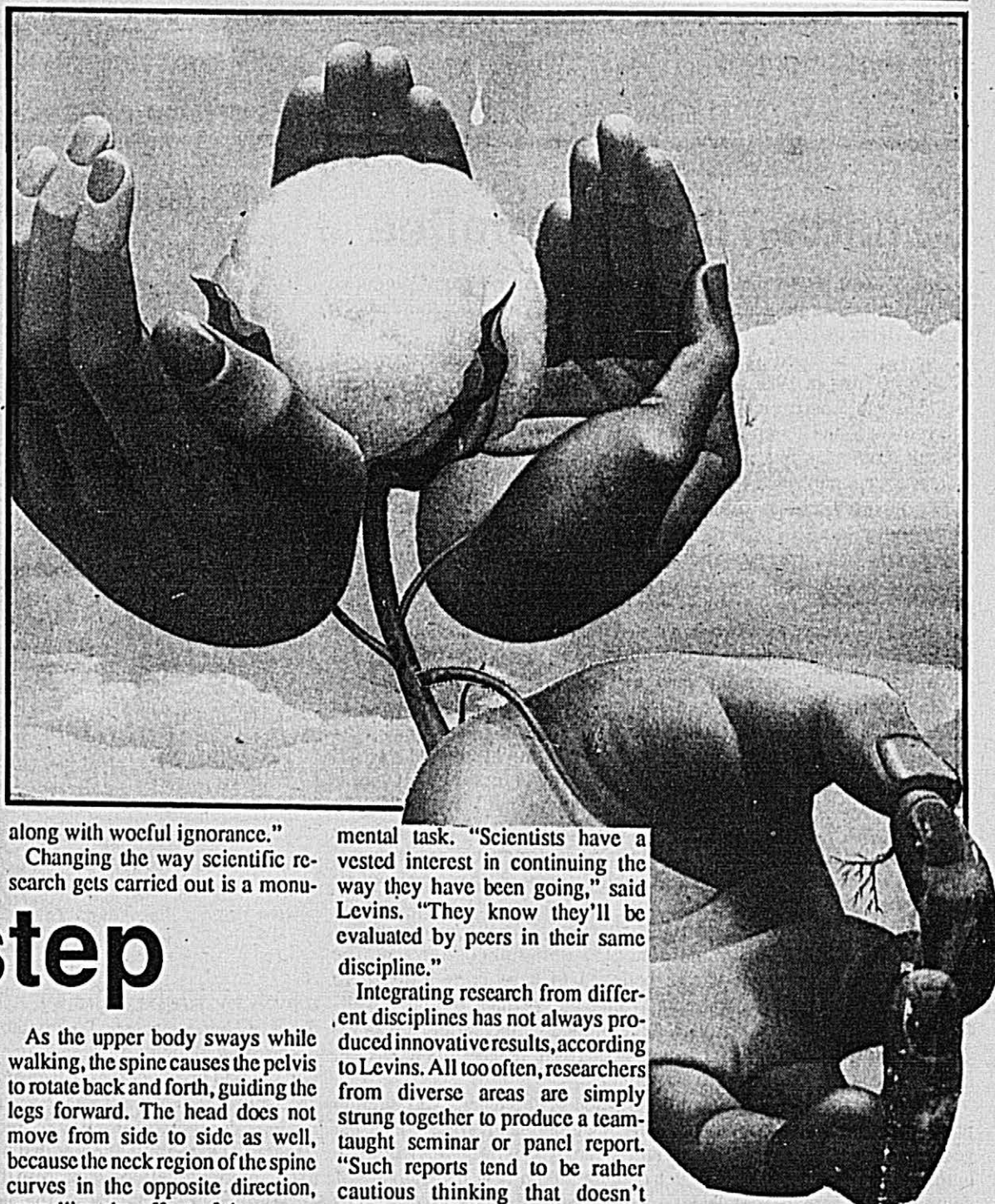
Levins delivered this year's Lorne Gales Lecture in the History of Science and Ideas.

Originally trained as a mathematical biologist at Cornell, Levins has long been interested in the relationship of science and society. His latest book, *The Dialectical Biologist*, co-authored with Richard Lewontin, is a culmination of his thinking in the philosophy of science.

Over-specialization produces irrational and counter-productive results, Levins argued. "A program might, in fact, increase the yield of wheat yet increase hunger, or a medicine may cure a disease in a few people, yet make that disease more common.

"Science is increasingly becoming a commodity produced for profit," Levins said, explaining the rise of specialization, "when you turn knowledge into commodities, not all kinds of knowledge can be equally marketed."

The actual structure of academia also leads to specialization. When "the boundaries of disciplines are held too rigidly and people think that becoming a good scholar means focusing narrowly on a research problem and solving it as quickly as possible. So that encourages a kind of intense knowledge



along with woeful ignorance."

Changing the way scientific research gets carried out is a monu-

mental task. "Scientists have a vested interest in continuing the way they have been going," said Levins. "They know they'll be evaluated by peers in their same discipline."

Integrating research from different disciplines has not always produced innovative results, according to Levins. All too often, researchers from diverse areas are simply strung together to produce a team-taught seminar or panel report. "Such reports tend to be rather cautious thinking that doesn't break new ground," he said.

Levins is particularly interested in the educational process that scientists go through. "I think the training of a scientist should include questions of where the problems come from," he said, "not just how to solve them." It should include a course on the social context of science.

"Once you recognize that the state of the science is a historical project you can begin to make decisions as to where you want to fit into that process," he said.

Curricula for educating scientists, according to Levins, should be flexible. "In general, students come out much better at solving problems than at posing problems," Levins said. "What we really need is people willing to pose problems in new ways—to challenge the boundary conditions, to examine the assumptions and ask where they come from, and to recognize even the most self evident truths have a history, and are accepted because of that history, not because of their truth value."

Levins has his critics, however.

Bill Shipley, a post-doctoral student in the Department of Ecology said that while Levin's ideas reasonable, he questions their usefulness. "Of course ecosystems we study are extremely complex," he said. "The only way to really go about discovering some of these interrelations and complexities is to study parts of these systems in isolation."

"People don't change their research methods because of a defect in their research system. They won't replace it until they find something better. And in his lecture and his books, Levins hasn't done this, he has simply criticized existing methods."

Science is increasingly becoming a commodity produced for profit... when you turn knowledge into commodities, not all kinds of knowledge can be equally marketed.

But McGill plant morphology professor Rolf Sattler is more sympathetic to Levin's ideas. "Specialization is a real problem that I feel very strongly about," he said. "We have a broad range of courses here, but students are not obligated to take them. The problem is that we have only isolated studies taking place. As long as we are aware of this it's okay, but when we take it for the whole, it is catastrophic."

Sattler said a group has been formed to combat academic parochialism at McGill. Organized by Vice Principal Academic Samuel Freedman, the Committee of Concerned Scholars has brought speakers to McGill to discuss the social significance of scientific research.

Watch your step

by Normand Cloutier

Most people would believe the main physical action that occurs during walking is the motion of the legs. This according to Concordia engineering and computer science professor Serge Gracovetsky, is

incorrect. "The legs are not essential for walking," he said in a recent lecture in the Concordia Science College public lecture series.

Gracovetsky asserts that the spine is actually the main engine in our bipedal (2 legged) locomotion.

To prove this, he showed a short film of a man, with no arms or legs, 'walking' on the two sides of his pelvis. The motion of his upper body was identical to that of a fully legged person walking.

Quadrupeds (four-legged ani-

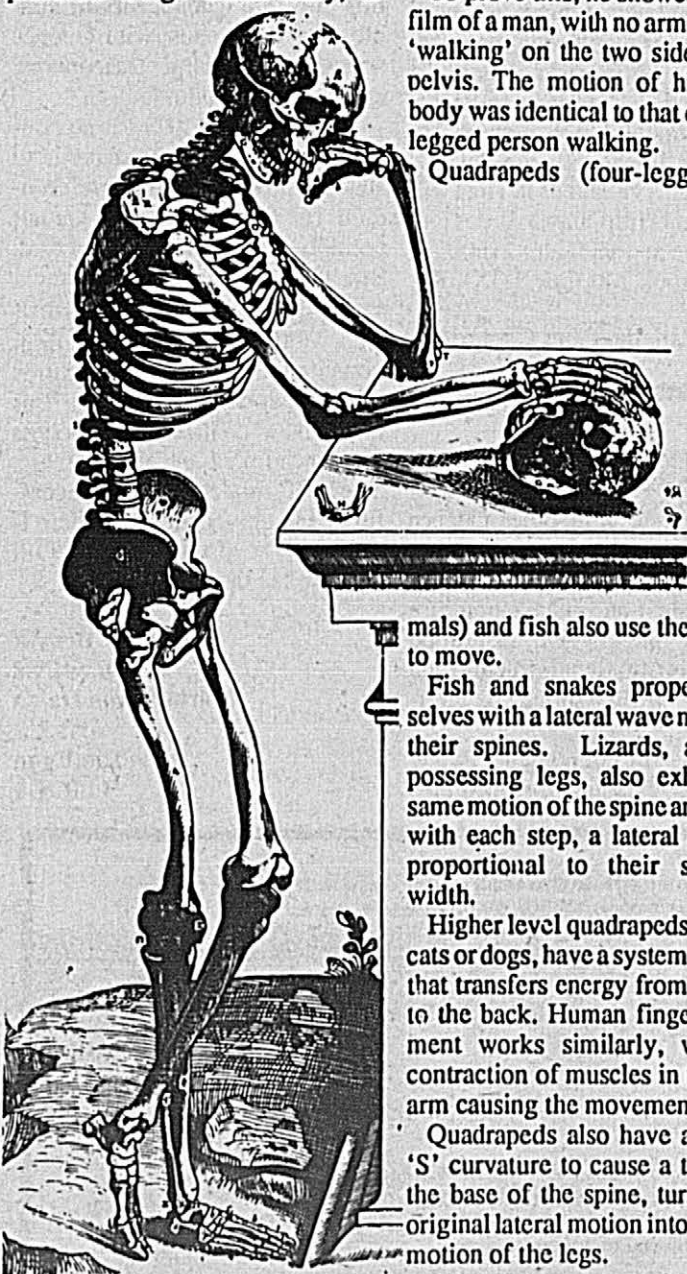
As the upper body sways while walking, the spine causes the pelvis to rotate back and forth, guiding the legs forward. The head does not move from side to side as well, because the neck region of the spine curves in the opposite direction, cancelling the effect of the curvature of the lower spine. It all results in a well coordinated two-legged human.

This novel mechanical description may be said to be of little value unless it can be applied in some way. Gracovetsky has not forgotten this. He has hoped to apply this theory to relieve back pain.

By observing the lateral motion of the spine, when performing certain movements, back problems can be traced to the exact location on the spine, without the use of X-rays. Gracovetsky has also developed a technique of detecting back problems before a person feels pain. "Walking actually involves very little back muscle activity," said Gracovetsky. Back pains are not caused by sore muscles but by structural damage to the spinal engine system."

Gracovetsky's ideas have helped design effective running shoes. According to Gracovetsky, the impulse created when the foot lands on the ground is transferred into energy to effect a forward motion. "The idea is not to cushion the foot to remove the impulse, but to control the impulse," he said.

The duration of the impact is also important. The impulse created when running on concrete is too high, whereas that caused by running on sand is too low. "The correct cushioning of the shoe would depend on the hardness of the surface. Essentially you'd want to design a shoe that could adapt to different surfaces" he said.



mals) and fish also use their spines to move.

Fish and snakes propel themselves with a lateral wave motion of their spines. Lizards, although possessing legs, also exhibit the same motion of the spine and move, with each step, a lateral distance proportional to their shoulder width.

Higher level quadrupeds, such as cats or dogs, have a system of fibers that transfers energy from the legs to the back. Human finger movement works similarly, with the contraction of muscles in the forearm causing the movement.

Quadrupeds also have a special 'S' curvature to cause a torque at the base of the spine, turning the original lateral motion into forward motion of the legs.

Ahhehehem... I have a second theory...

—A-n-n-e Elk

the mcgill Daily

77th year of publication

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Canada-Tibet Committee

In a 74 page report released in February, the Asia Watch Committee harshly criticizes the Chinese government for systematic abuses basic human rights in Tibet.

The report is based almost entirely on information gathered by Asia Watch in Tibet in 1987. Although Asia Watch asked to send a formal delegation to Tibet to meet with Chinese officials and to obtain their views, our request to the government for such a visit was refused. Accordingly, we relied on interviews with private citizens in Tibet and on our reading of documents published by the government.

The report discusses Chinese government policy and practice in a number of areas.

The report criticizes strict limits on written and spoken expression in Tibet. It notes that such restrictions are stringently applied to all political utterances and actions, and are enforced by an extensive surveillance network. The report also describes restrictions on leaflets and wall posters expressing dissenting views. It notes that "mere possession of the flag of the traditional Tibetan government is a serious offense; even more serious is the possession of materials originating among the Tibetan exiles in India." Such offenses can result in long prison terms.

According to the report, authorities frequently arrest political activists in Tibet for public expressions of opposition to the Chinese role or Chinese policies in Tibet, or for political support for the Dalai Lama or Tibetan independence. Arrests usually take place at night, and family members are often not informed. It appears that it is at the interrogation, rather than at any trial where a decision on guilt is made. Torture is also commonplace during the interrogation process.

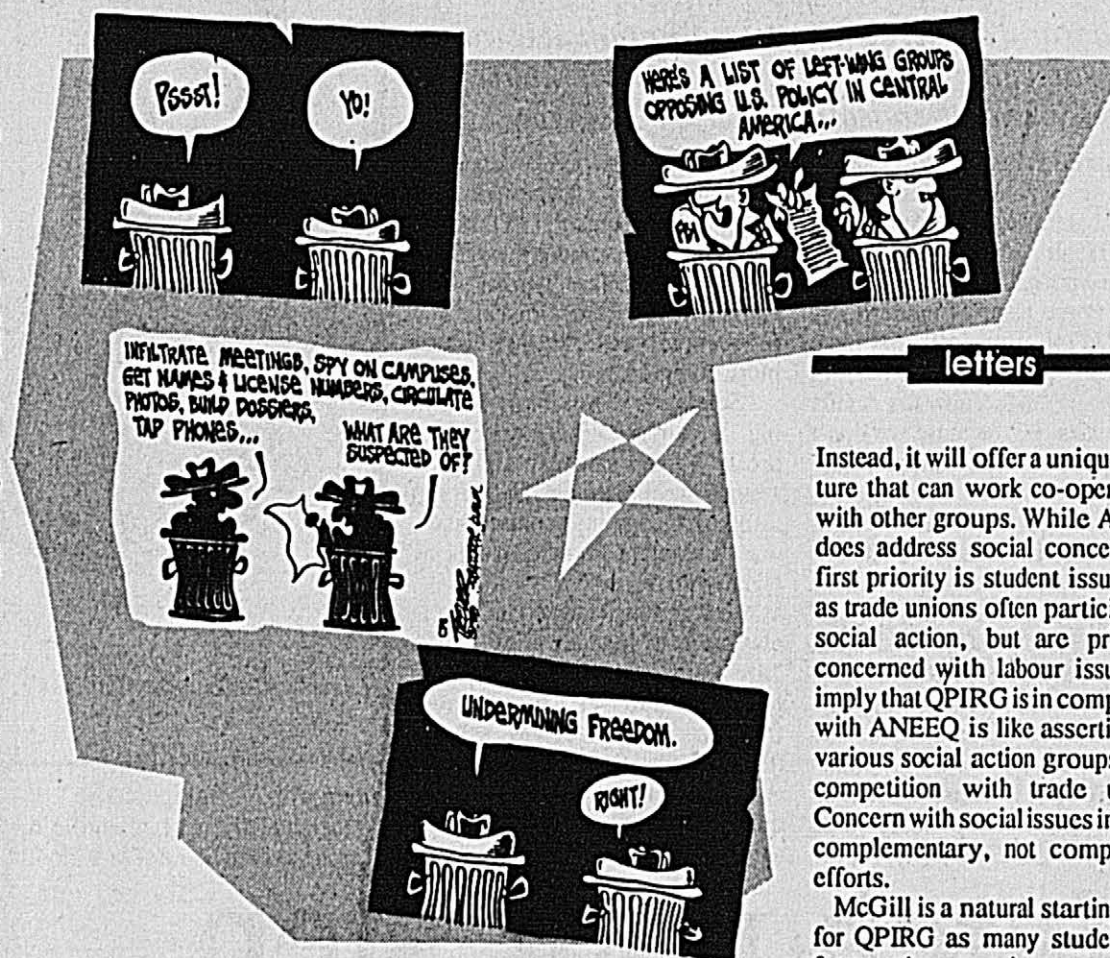
Mistreatment is not confined to interrogation. Asia Watch reports that prisoners are subjected to various forms of abuse during confinement. The report describes in detail torture believed to have been inflicted in February 1987, on Geshe Lobsang Wangchuk, perhaps the most well-known Tibetan political prisoner. Several months thereafter, it was reported that he had died. Chinese authorities have denied this report but have not permitted outsiders to see him.

The report contains a detailed description of the events surrounding protests in late September and early October, and argues that the government's actions "follow from and accord with its previous record on human rights in Tibet." Asia Watch describes reports of the shooting of demonstrators, hundreds of detentions, the torture of detainees and deaths in custody. The report lists the names of dozens of persons believed to have been arrested.

The Asia Watch report notes that the Chinese have permitted reconstruction of Buddhist temples and monasteries and have allowed monastic ranks to grow in recent years. However, the report describes a number of continuing restrictions on religious freedom, including the need for official approval—which is often not granted—for the reconstruction of religious buildings; government control of the financial management of monasteries; government regulation of the numbers of monks in various monasteries and exercise of the power to refuse entry into the monastic ranks; an apparent prohibition on teaching and propagation of Buddhism in most of Tibet; and government efforts to take Buddhist education out of the hands of the monasteries.

Although the Asia Watch report takes no position on the issue of Chinese sovereignty over Tibet, it does express concern about the transfer of Chinese into Tibet, due to the impact on Tibetan culture and the evidence of strong patterns of discrimination against the Tibetan population arising out of the growth of the Chinese population. The report describes discriminatory policies with respect to housing, access to services, freedom of movement, education and economic opportunities.

In addition, the report finds that Tibetans are "increasingly being moved by design into disadvantageous economic and social positions vis a vis the plateau's growing population in the cities and towns." In this respect, it notes that the PRC government only a few years ago was contending that family size restrictions would not apply to Tibet, so that Tibetans could build up their population and thus develop Tibet's economy. Now, however, restrictions on family size are imposed while Chinese migration is



actively encouraged. Moreover, Asia Watch notes credible reports from Tibet of abortions carried out without the consent of the mother.

The Asia Watch report calls upon the Chinese government to adopt policies and practices that will ensure: respect for freedom from torture or cruel and inhuman punishment; freedom from arbitrary arrest; freedom of thought, conscience or religion; freedom of opinion and expression; and freedom of assembly. It notes that the Chinese government is a signatory to the International Convention on the Elimination of All Forms of Racial Discrimination, and calls on the authorities to work vigorously to end irregularities in access to housing, education and employment in Tibet.

Asia Watch, a Washington-based human rights monitoring organization, was established in 1985 and is affiliated with Helsinki Watch and Americas Watch. The three groups have joined to form Human Rights Watch. The chair of Asia Watch is Jack Greenberg; the vice-chairs are Matthew Nimetz and Aryeh Neier; the program director is Eric Schwartz.

A peaceful demonstration to protest human rights violations in Tibet will take place Thursday March 10, 13h00, Parliament Hill, Ottawa. Buses will leave Montréal at 10h00. Call 670-7356 between 18h00 and 21h00, or contact: Canada-Tibet Committee, 4675 Coolbrook, Mt. Que. H3X-2K7, 487-0665.

Canada-Tibet Committee

letters

QPIRG responds...

To the Daily,

The February 17 article and comment about the QPIRG organizing drive at McGill contained a number of factual errors and were unfairly biased. An examination of the widely distributed QPIRG literature enables the identification of many errors, while the slants of the texts were self-evident. Nonethe-

less, some valid concerns were raised. The issues of: how QPIRG will integrate with other Québec student and social organizations such as ANEEQ, the legitimacy of starting such an organization at a primarily anglophone institution and the constitutional structure and status of QPIRG should be clarified.

QPIRG will not compete in any way with existing organizations.

Instead, it will offer a unique structure that can work co-operatively with other groups. While ANEEQ does address social concerns, its first priority is student issues, just as trade unions often participate in social action, but are primarily concerned with labour issues. To imply that QPIRG is in competition with ANEEQ is like asserting that various social action groups are in competition with trade unions. Concern with social issues involves complementary, not competitive, efforts.

McGill is a natural starting point for QPIRG as many students are from other provinces or states where they have seen PIRGs in action. As a primarily anglophone institution with a growing francophone reality, McGill presents a natural link between the North American PIRG movement and francophone Québec. To suggest that it is inappropriate for McGill students to initiate social action in this province ignores McGill's increasing integration with Québec society and its large francophone enrollment and bilingualism.

To state that QPIRG has no constitutional structure or status is to state the obvious. Until the referendum has passed, QPIRG cannot possibly have any formal structure. But all of the literature has stated explicitly how QPIRG will function. QPIRG has prepared a draft constitution for Senate ratification which anyone can examine. This constitution contains a full process for amendment by membership. The PIRG model has been successful at 138 universities, and there is no reason to assume that McGill will reverse the trend.

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B.Sc. '88
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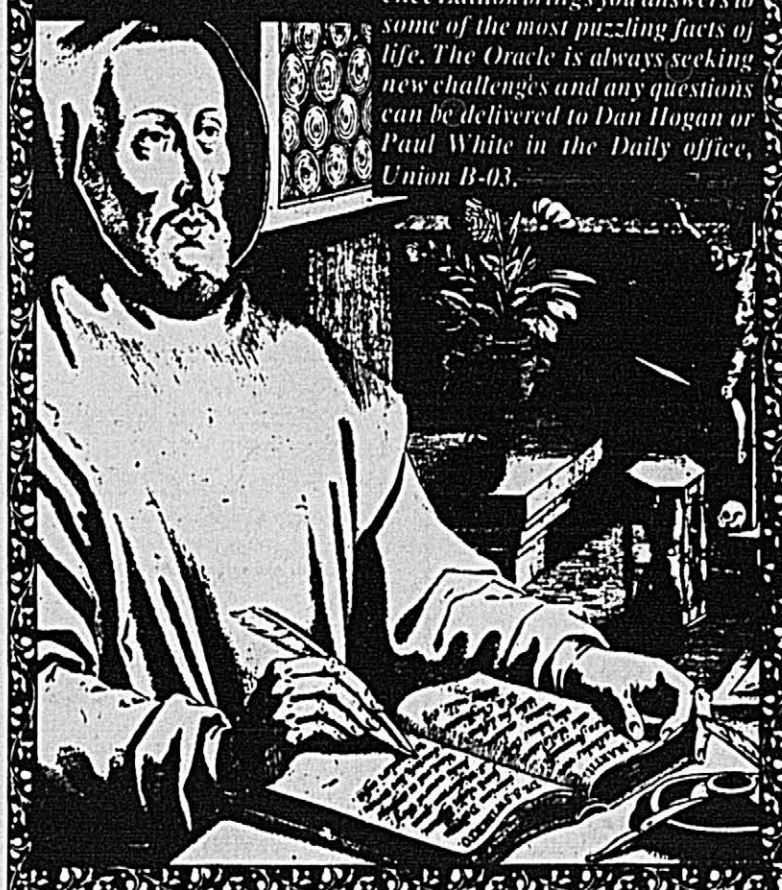
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by Paul A. White
and Dan Hogan

It's a confusing world out there, just teeming with scientific wonders. Every month, the Daily Science Edition brings you answers to some of the most puzzling facts of life. The Oracle is always seeking new challenges and any questions can be delivered to Dan Hogan or Paul White in the Daily office, Union B-03.



The Oracle speaks:

On antimatter, lifesavers and tattletape

What is antimatter? Where does it exist? How can the opposite of something, which is nothing, be anything?

Carol Bethune
U2 History

Antimatter is a sort of 'mirror image' of matter. It is composed of particles with the same mass and spin as matter, but with opposite electromagnetic properties.

Although scientists have not yet discovered large amounts of antimatter in the universe, they have been able to detect antiparticles since the 1930's. British physicist Paul Dirac first proposed the existence of antiparticles in order to resolve an inconsistency between quantum mechanics and Einstein's theory of relativity. Quantum mechanics said that the lowest possible energy level of an electron in an atom is zero. But Dirac found that relativity predicted the existence of particles with 'negative energy'.

If it were possible for electrons to have negative energy, he reasoned, then what would prevent them from falling to lower and lower energy levels? Matter would literally vanish in a flash of light.

In order to avoid this theoretical paradox, Dirac postulated that all the negative energy levels were completely filled with 'invisible' particles. But positive energy electrons would no longer be able to fall to energy levels below zero, nothing in Dirac's theory prevented

negative energy electrons from jumping to levels above zero. If this happened, a strange 'hole' would be left in the sea of negative energy electrons. Since these electrons have negative charge and energy, the hole would have positive charge and energy. Dirac called this hole a *positron*, or anti-electron.

Soon after Dirac proposed his theory, U.S. physicist Carl Anderson discovered positrons while studying cosmic rays. Since then, other antiparticles such as the antiproton, antineutron and antineutrino, have been discovered.

The most important consequence of these discoveries was the realization that particles and their corresponding antiparticles could annihilate each other, producing gamma-rays, particles called 'pions' and other subatomic stuff. Another consequence was the possibility of producing atoms of antimatter with positrons orbiting around nuclei of antiprotons and antineutrons. The closest thing to an 'anti-atom' so far has been *positronium*, an unstable electron-positron pair with a lifetime less than one ten-billionth of a second.

I've heard that wintergreen lifesavers will make sparks (in the dark) when you crunch them in your teeth. Is this true? If so, how does it happen?

Carol Bethune
U2 History

Frankly, we were surprised to find out that this is indeed true. It is caused by a physical phenomenon

known as triboluminescence.

In general luminescence is the emission of light by relatively cold materials. What happens is that atoms and molecules become energized or excited and release the excess energy in the form of light. Excitation can be caused in a number of different ways, via absorption of visible light or other forms of radiation, collisions with charged particles, chemical reactions and friction between two materials. It is this latter process that results in triboluminescence.

In the case of wintergreen lifesavers, crushing the crystals within the candy by biting down on them results in the energy excitation necessary to cause the flashes of light. A number of compounds have been found to do this, including the minerals sphalerite (zinc sulphide) and corundum (aluminum oxide).

How does the security system in the McGill University libraries work? What is it about the books that causes the beeping sound and locks the turnstile if someone tries to exit with a book that is not properly signed out?

Arne Mooers
U3 Biology

To tell you the truth we were surprised at how hard it was to answer this question. Nobody we could find at the university knew in detail how the security systems worked. We also encountered some reluctance on the part of the faculty to help us in answering this question. One physics professor who we thought might be able to help us said, "...even if I knew, I don't know if I would tell you. I think you will be doing the university a disservice by answering this question, because it will promote the theft of books from the library."

We disagree, you don't need to know about the electronics of a library security system to steal books, and it is not our intention to promote the theft of books in any way.

In any case here's what we could find out.

A strip of metal tape called *tattletape* is placed somewhere in each book (the location is a closely guarded secret). It seems the tape is magnetized when the book is in the library, and if someone tries to leave with it, the set-up at the exit detects this magnetism and the result is a beeping noise and a locked turnstile. When someone signs out a book, the library staff runs the book through a piece of equipment that 'desensitizes' or erases the magnetic signal on the tape. As to

continued on page 6

...Arthritis

continued from page 1

What has happened is that the immune response has been mistakenly switched on, due to a failure in the normal feedback response that turns it off. We are all familiar with the tenderness, heat and redness that results when the blood supply to an infected area is increased. This is also part of the immune response, and it causes the pain of rheumatoid arthritis.

What is puzzling about rheumatoid arthritis is the cause of the immune reaction. In children, German measles is a major cause of arthritis. No pathogens have been identified in adults in spite of a careful search.

One possible explanation is that bacterial cell walls, which are hard to break down, become stuck on the surface of macrophage cells of the immune system. These cells send out chemical signals that stimulate the immune response. Recalcitrant bacterial cell walls may leave the system stuck in the 'on' position.

A clue to an alternative solution to the puzzle may lie in the fact that a distinctive surface structure is always found on the macrophages involved in rheumatoid arthritis. The same genetic sequence that codes for this surface structure is also involved in the regulation of the immune response. This sug-

gests that the origin of rheumatoid arthritis rests in the expression of the genetic code of these particular macrophages. With this evidence as a guide, research on arthritis is underway at every major university in Canada and the United States.

A treatment that locally curtails the immune response by preventing the increased blood supply to the affected area is effective for 85 per cent of rheumatoid patients. For the remaining sufferers, a few drugs that poison immune system cells are available. These must be used carefully to minimize damage to the rest of the immune system.

Other treatments, such as sitone, beaver kidneys, camphor and acupuncture, have the same success rate as placebos. One third of patients suffering from pain will claim relief if given placebos or any of these treatments. Kapusta said, "If it makes you feel good and it's harmless, go for it." European spa treatments are helpful in cases where rheumatism results from stress. At least a month of pampering is required to relax.

Finally, Kapusta said that the old wives' tale of rheumatism flaring up when the weather changes is well founded. Pain may be caused by fluid shifts when the air pressure changes. In effect, humans can act as crude barometers.

...Cancer food

continued from page 1

alter the microbial flora of the intestine. High levels of bile acids are known to cause colon cancer.

Of the four types of fibre which have been tested, pectin, lignin, oat bran and wheat bran, only wheat bran has been found to have a negative effect on cancer incidence.

Role of nutrition in cancer

"There is no denial that nutrition has a definite effect on cancer," said Batist. But as far as the specific relationship between diet and cancer is concerned, he urges researchers to "clearly define the questions as they go."

"Use common sense when planning your diet, and be aware that obesity is a risk factor for certain types of cancer," he said. Batist added one should "decrease fat intake and increase intake of wheat bran fibre, but not in a religious fashion. It is best to have a varied

diet. He also said to cut down on barbecuing."

"Keep in mind that recommendations made by committees are *interim*," said Batist, meaning that they are made on the basis of incomplete research.

Batist said holistic medicine was not a reliable cure. "What do I tell a patient who follows the diet to the letter and the tumor still grows? And how do I deal with patients who blame themselves when the macrobiotic diet does not work?" he asked. Holistic medicine advocates then began to cite examples of their success.

"Many people do well, but some don't," said Batist. "Treating cancer is not a matter of religion; it is a matter of actually helping people," he added. "I do not like to see patients depriving themselves of their favourite foods and building up false hopes. I want to know, not just believe."

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...Oracle

continued from page 5
the exact nature of the magnetic signal, and the method by which the equipment desensitizes and resensitizes the tattletape, nobody seemed to be able to tell us. An employee of the MacLennan library thought that the signal encoded on the tattletape is probably the same at all libraries, although we couldn't confirm this. We attempted to get more information from Ram Security Inc., a company that sells the security systems, but they did not return our call.

McGILL
ARTS & SCIENCE
UNDERGRADUATE SOCIETY

A.S.U.S. ELECTIONS

March 23rd and 24th, 1988

McGILL
ARTS & SCIENCE
UNDERGRADUATE SOCIETY

Nominations are now open for the following
Arts and Science Undergraduate Society positions:

- PRESIDENT
- V-P FINANCE
- V-P ARTS
- V-P SCIENCE
- V-P ADMINISTRATION
- V-P INTERNAL AFFAIRS
- THREE ARTS REPRESENTATIVES TO SSMU COUNCIL
- TWO SCIENCE REPRESENTATIVES TO SSMU COUNCIL
- TWO ARTS MEMBERS-AT-LARGE
- TWO SCIENCE MEMBERS-AT-LARGE

Nominations Packages are available in the ASUS Office
Room 319, Leacock Building. For further information, call 398-6979.

NOMINATIONS CLOSE WEDNESDAY, MARCH 9th, 1988

Those interested in working as poll clerks for the election, please sign your name, telephone number and hours available on the ASUS Office door - Leacock 319

Noah Cowan
Chief Returning Officer

Ads may be placed through the Daily business office, room B-17, Student Union Building, 9am - 3pm. Deadline is 2pm two weeks prior to date of publication.

McGill students: \$3.00 per day; \$7.00 for 3 consecutive days; \$2.00 per day for more than 3 consecutive days. McGill faculty and staff: \$4.00 per day. *Exact change only, please.* Boxed ads are available at the cost of \$4.00 per ad / per day — no discounts on boxing.

boxing.

The Daily assumes no financial responsibility for errors, or damage due to errors. Ad will re-appear free of charge upon request if information is incorrect due to our error. The Daily reserves the right not to print any classified ad.

341 -- APTS., ROOMS, HOUSING

To sublet for 2 months (April & May): a room

in a huge and beautiful 9 1/2, corner deMaison-neuve and Visitation, \$137.50 + utilities. Call 526-3291 or inquire at Daily - ask for Pierre Tordjman.

6 1/2 to share, \$175.00 everything included. Beautiful room. March 1 or before. Must be gay positive. Call 274-6494 or GALOM.

Sublet 3 1/2. March to August (option to renew) corner of Fort and Tupper. Rent negotiable. Call evenings/weekends. Claude: 937-1162.

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Sublet 3 1/2 by Guy metro. Completely furnished ("Ikea") queen-sized bed. May 1 - Aug 31 \$435 per month. 939-9562.

343 -- MOVERS

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350 -- JOBS

Graduate students wishing to work during university exam period as invigilators: apply now (before March 14) to Jan Lundgren, chief invigilator, Geography (tel 4304).

I'm a singer-composer, and I'm looking for a collaborator for the craft of the lyrics of my songs. Experience is preferable, but not an obligation. Call Sue: 463-1376.

354 -- TYPING SERVICES

Typing Services: English — resumés, \$5.00; letters, \$2.00; term papers and essays, \$1.25/page double-spaced for students. Rachel 933-0078 days & evenings. Near McGill.

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361 -- ARTICLES FOR SALE

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Round trip air ticket - male, good for 1500 miles from departure point. Must be used by April 28. \$225 or best offer. Daniel 288-9364, leave message.

367 -- CARS FOR SALE

Not "Bob Marley & The Wailers", but a 1973 model 2002 BMW. \$4,000 - negotiable. Ask for Yves or leave message, 526-3291.

372 -- LOST & FOUND

LOST -- Friday Feb 19 near men's washroom in basement of Union Bldg - two rings; gold signet ring (crest: heart with wings); the other is a large heavy silver thumb ring. If found contact Ian Pringle at 398-6787, 525-6526. No questions will be asked, reward (over \$100) is offered. Rings could also be dropped off at Radio McGill.

374 -- PERSONAL

McGill Nightline... listening, information and referrals... till the wee hours of the morning. 7 days-a-week. 6pm till 3am. 398-6246.

Welcome home you guys and gals! How was your week? Did you see your pals? Call McGill Nightline, 398-6246, we'd love to hear about it.

QPIRG: It'll get students noticed. But only with your "Yes" vote. Help set up QPIRG on March 9, 10, or 11.

383 -- LESSONS OFFERED

Yoga classes continuing at the Yellow Door, Thursdays, 6pm. \$20 for 4 weeks. Call Ed at 398-6244 or Heather (Instr.) at 933-3588 (evenings) for information.

385 -- NOTICES

Deadline: Friday March 4 1988. The Noel Fieldhouse Award for Distinguished Teaching. All full-time academic staff in the faculty of Arts are eligible. Submit a nomination to: John Thompson, Committee on Teaching, History Department, Leacock Building.

389 -- MUSICIANS WANTED

Electric guitarist wanted for established folk-rock band. Please call Kevin 939-9627 or George 848-0349.

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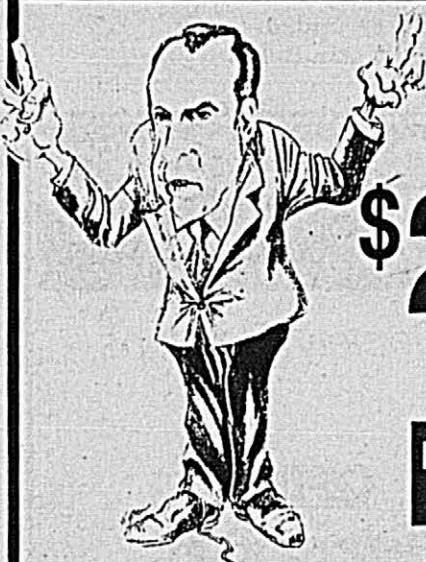
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- 1) Will help decide how the 1.5 million dollar operating budget is allocated?
- 2) Will be the signing officer for a budget of over \$50,000?

REMEMBER TO VOTE ON
MARCH 9, 10, 11



Christina Sbrocchi
Chief Returning Officer
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"ISRAEL: TODAY AND TOMORROW"

Wednesday, March 16, 1988

McGill University Leacock Bldg., Room 132
7:30 P.M.

Presented by: Hillel Student Society and Canadian Student Committee for Israel (CSCI)
In cooperation with: Youth and Hechalutz Dept.; Israel Aliyah Center; Israel Youth Program Center; Kibbutz Aliya Desk; Canadian Zionist Federation Eastern Region; B'Nai B'Rith Mount Royal Lodge

For tickets please contact: Steve - McGill Hillel - 845-9171 / Larry - Concordia - 848-7492 / Harvey - Israel Youth Program Center - 481-0218

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Christina Sbrocchi
Chief Returning Officer
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events

Today

Southern Africa Committee:
meeting, Union 410, at 19h30.

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notes from below

re: "The gyp of the icePIRG,"
(Daily, Feb. 17).

The QPIRG executive will not consist of professional researchers. The QPIRG executive will consist of a student elected Board of Student Directors. QPIRG's paid staff will be under the direction of this Board.

QPIRG does have a constitution and will be controlled by it as well as by its Board.

QPIRG does not intend to create a Québec lobbying network. The stated goals of PIRG are "research, education and action on issues of public concern (and) to work for beneficial social change."

Stephanie Lachowicz

errata

re: "PIRG vote may happen in March" (Daily, Feb. 17).

QPIRG does have a draft constitution written by its student members. Furthermore, the constitution contains clauses for student input. The constitution is waiting for approval by McGill's Senate.

QPIRG has defined the specific role students will play in the organization. QPIRG's Board of Directors, its goals and its priorities will all be established by student members.

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STUDENTS' SOCIETY ELECTIONS-MARCH 9,10,11 ANNOUNCEMENT OF REFERENDA

The following referendum questions will be voted on during the Students' Society Elections
(to be held on March 9, 10, 11):

Access McGill Referendum

Whereas the situation of under-funding at McGill University does not permit an adequate amount of money to be used for services, equipment and facilities for the disabled;

Whereas there are more disabled students at McGill University today than ever before;

Whereas many disabled students are forced to accept inadequate and inferior services, equipment and facilities

Do you approve of a temporary (2-year) levy of \$2.00 per student per semester, the revenue of which shall be used to provide the required services, equipment and facilities to be allocated by the joint Senate Board of Governors committee on the disabled, subject to annual review?

Put an X in one box:

YES ☐

NO ☐

NO OPINION ☐

Constitutional Amendment

Whereas the Constitution of the Students' Society of McGill University was approved by Senate with the following recommendations

a) the Judicial Board not be excluded from exercising jurisdiction over faculty and school associations and,

b) articles dealing with fee referenda require 10% participation in vote.

Do you approve of an amendment to the Constitution of the Students' Society of McGill University which would make the following changes as of May 1st 1988?

In Article 18.2 delete

"However the Judicial Board shall not have jurisdiction over Faculty or School Society Constitutions"

In Article 4.2 add

"Quorum for such a referendum shall be 10% of the membership of the Society"

(See wording in this issue)

Put an X in one box:

YES ☐

NO ☐

NO OPINION ☐

Constitutional Amendment

Do you approve of an amendment to the Constitution of the Students' Society of McGill University which, on May 1st, 1988, would replace section 4.1, 8.6, 7.5, 7.8, 7.9, 7.10, 7.11, 7.12, 16.4 to 16.7 of the Constitution with the proposed new wording as published in the McGill Tribune March 1st, 1988?

Put an X in one box:

YES ☐

NO ☐

NO OPINION ☐

QPIRG Referendum

Do you approve of:
The creation of a chapter of the Québec Public Interest Research Group (QPIRG) at McGill University, which will operate as a student-funded, student-directed research, education and action organization pursuing the interests of students on issues of public concern;

The addition of a fee of three dollars (\$3.00) per student per semester (\$1.50 for additional session students) to the McGill University fee statement as of September 1988 to fund QPIRG;

and

The transfer of the above money directly to QPIRG and that any student who does not wish to support QPIRG shall have the opportunity to obtain a refund directly from QPIRG?

Put an X in one box:

YES ☐

NO ☐

NO OPINION ☐

Deadlines for NO Committee registration: Wednesday, March 2nd at 1p.m.

See the CRO, Room 412, Union Building.

Christina Sbrocchi - Chief Returning Officer